

Scaled data based on original data using
LM-79-08 Approved Method: Electrical and Photometric Measurements of Solid-
State Lighting Products

Test Report Prepared for
Cooper Lighting Solutions
(formerly Eaton)

Brand: STREETWORKS

Report Number: P399981

Luminaire Tested: **ARCH-L-PA3-220-722-U-T4W-HSS**

Issue Date: 5/19/2020

Test Information

Test Method: LM-79-08
Report Number: P399981
TEST IS SCALED FROM IESNA LM-79-08 TEST DATA (G2-1910-568-15)
Test Lab: INNOVATION CENTER
Issue Date: 5/19/2020
Manufacturer: COOPER LIGHTING SOLUTIONS (FORMERLY EATON)
Product Line: STREETWORKS
Catalog Number: ARCH-L-PA3-220-722-U-T4W-HSS
Description: ARCHEON-L ROADWAY AND AREA LUMINAIRE
(3) 70 CRI, 2200K, 945mA LIGHT ENGINES WITH 24 LEDS AND TYPE IV WIDE OPTICS WITH HOUSE SIDE SHIELD
Light Source: -
Ballast/Driver: ELECTRONIC DRIVER

Summary

Lumens per Lamp: N/A
Luminaire Lumens: 16404 lumens
Efficiency: N/A
Efficacy: 73.9 lumens/watt
Luminous Opening: Rectangular (W 0.75' x L: 1.5' x H: 0')
IES Classification: Type IV - Medium
BUG Rating: B1 - U0 - G4

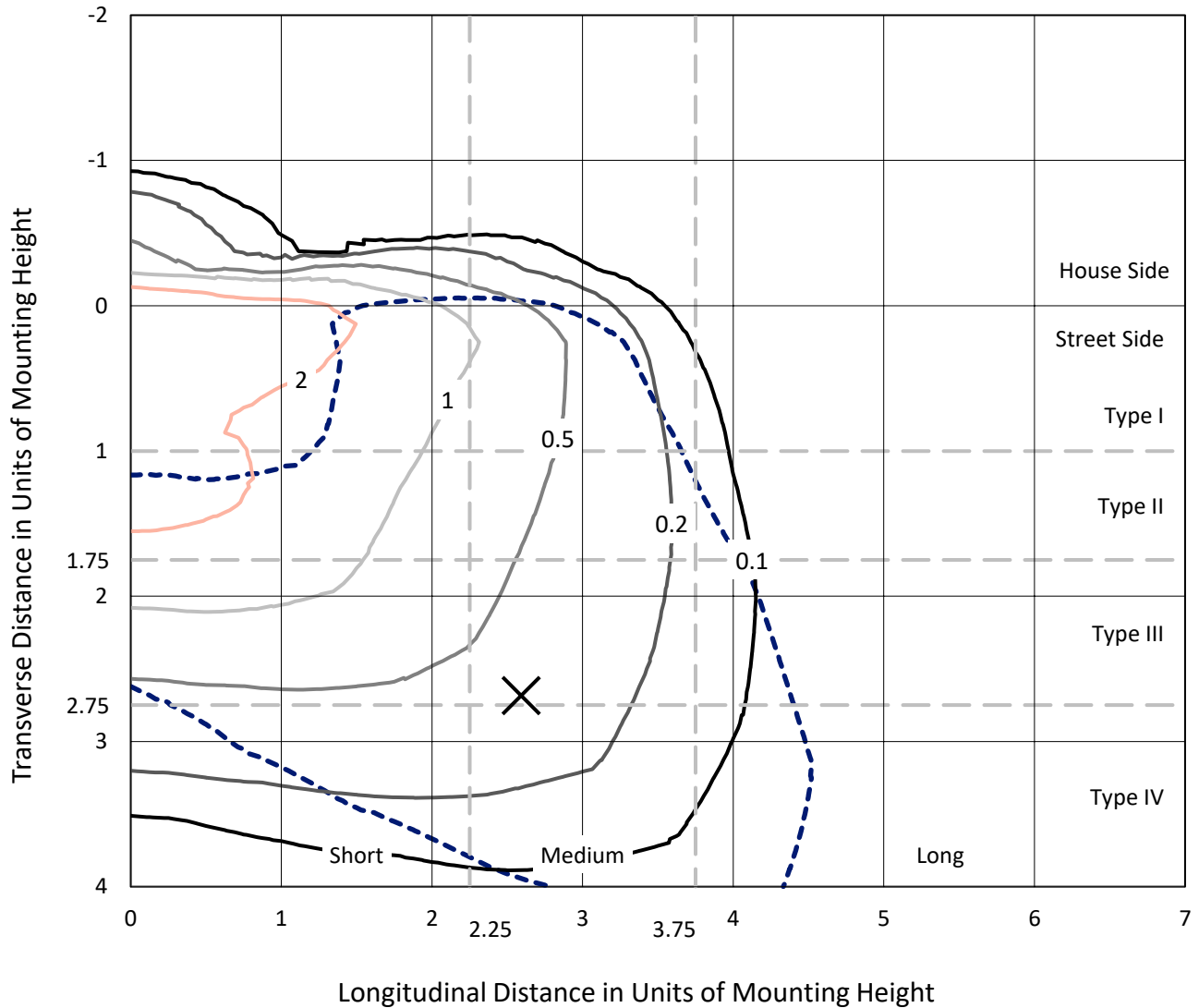
Input Watts (W): 222
Input Voltage (V): NR
Input Current (Ain): NR
Voltage Rise (V): NR
Power Factor: NR
Total Harmonic Distortion (THDi): NR
Frequency (hertz): 60
Stabilization Time: NR
Operation Time: NR
Ambient Temperature (°C): NR
Test Distance: 28.75 FT



REPORT NUMBER: P399981
 CATALOG NUMBER: ARCH-L-PA3-220-722-U-T4W-HSS

Iso-Footcandle Lines of Horizontal Illumination

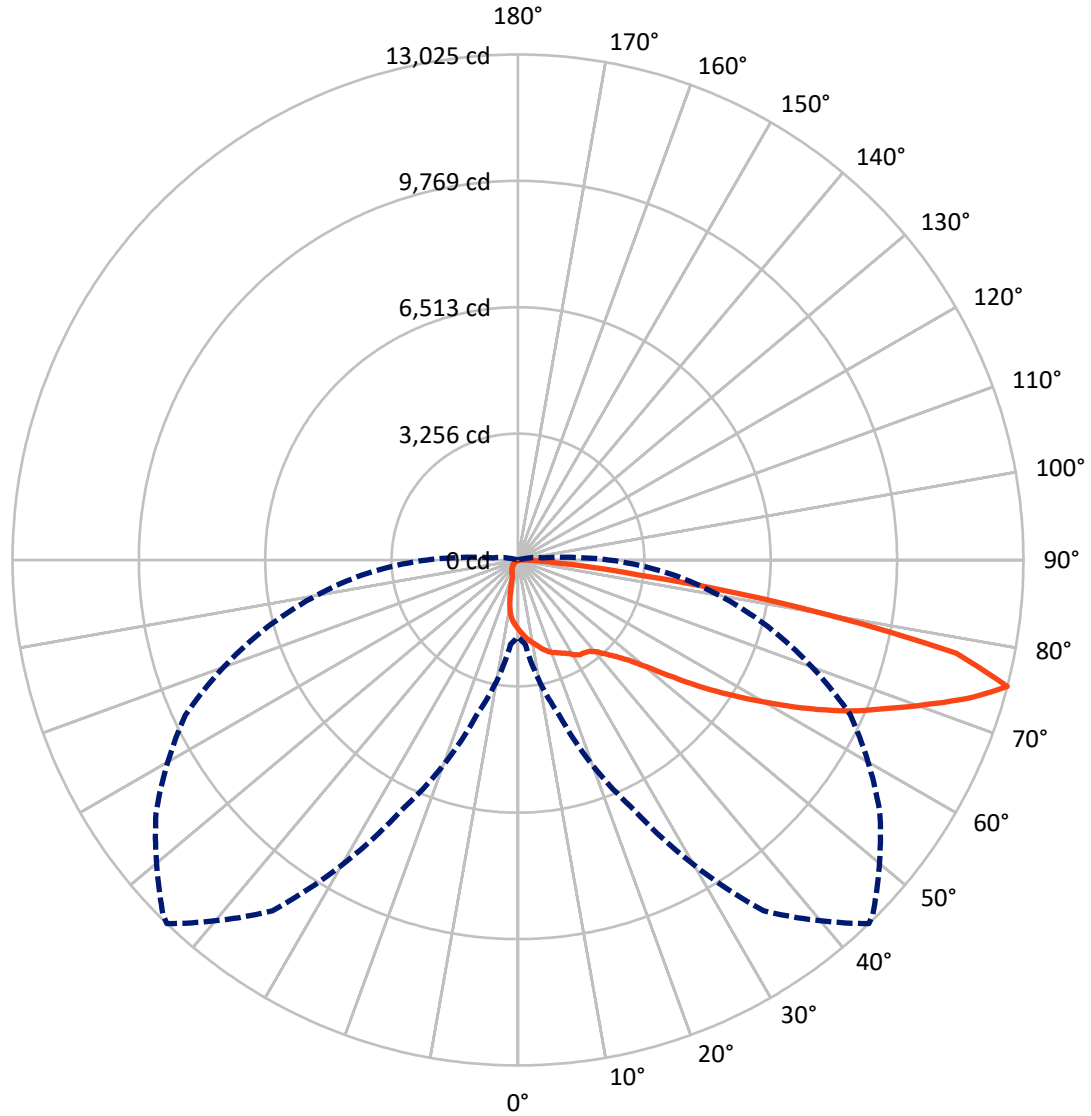
× Max cd
 - - - 1/2 Max cd



Based on 25 foot mounting height. Maximum calculated value = 3.9 fc
 Type IV - Medium - N/A

REPORT NUMBER: P399981
CATALOG NUMBER: ARCH-L-PA3-220-722-U-T4W-HSS

Luminous Intensity Polar Plot



— Vertical Plane Through 44-Deg Lateral - - - Horizontal Cone Through 75-Deg Vertical

REPORT NUMBER: P399981
 CATALOG NUMBER: ARCH-L-PA3-220-722-U-T4W-HSS

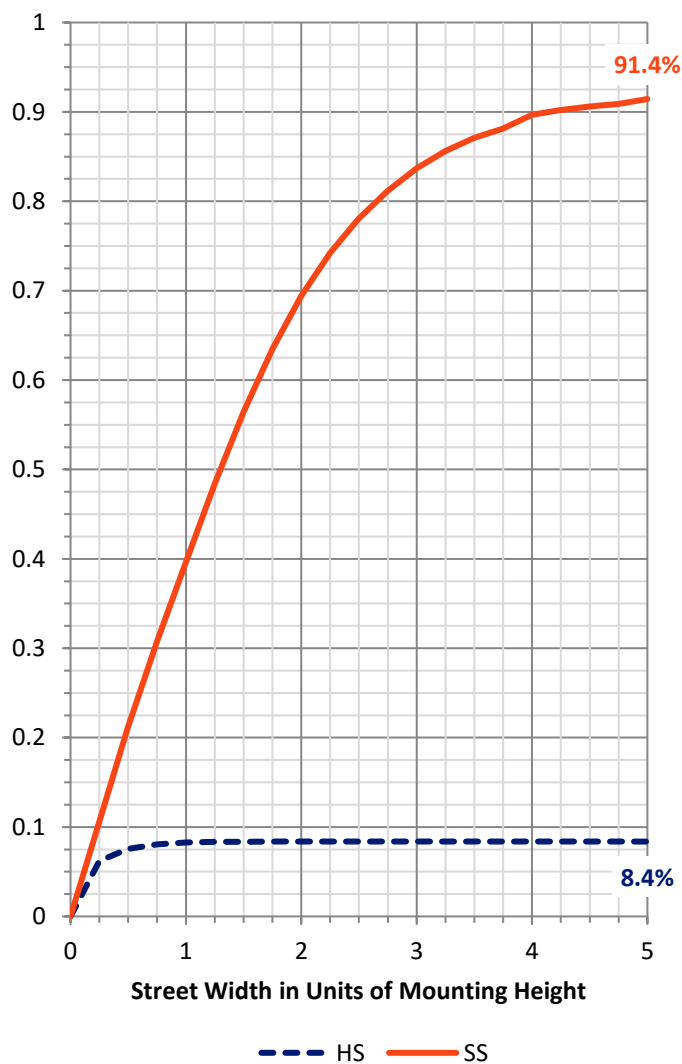
FLUX DISTRIBUTION:

		Downward	Upward	Total
House Side	Lumens	1383.4	0.0	1383.4
	% Fixture	8.4	0.0	8.4
Street Side	Lumens	15020.6	0.0	15020.6
	% Fixture	91.6	0.0	91.6
Total	Lumens	16404.0	0.0	16404.0
	% Fixture	100.0	0.0	100.0

ZONAL LUMENS:

Zone	Lumens	% Fixture
0°-10°	168.4	1.0
10°-20°	471.8	2.9
20°-30°	778.7	4.7
30°-40°	1130.2	6.9
40°-50°	1837.1	11.2
50°-60°	3238.7	19.7
60°-70°	4654.7	28.4
70°-80°	3727.3	22.7
80°-90°	397.1	2.4
90°-100°	0.0	0.0
100°-110°	0.0	0.0
110°-120°	0.0	0.0
120°-130°	0.0	0.0
130°-140°	0.0	0.0
140°-150°	0.0	0.0
150°-160°	0.0	0.0
160°-170°	0.0	0.0
170°-180°	0.0	0.0
0°-90°	16404.0	100.0
0°-180°	16404.0	100.0

Coefficient of Utilization



REPORT NUMBER: P399981

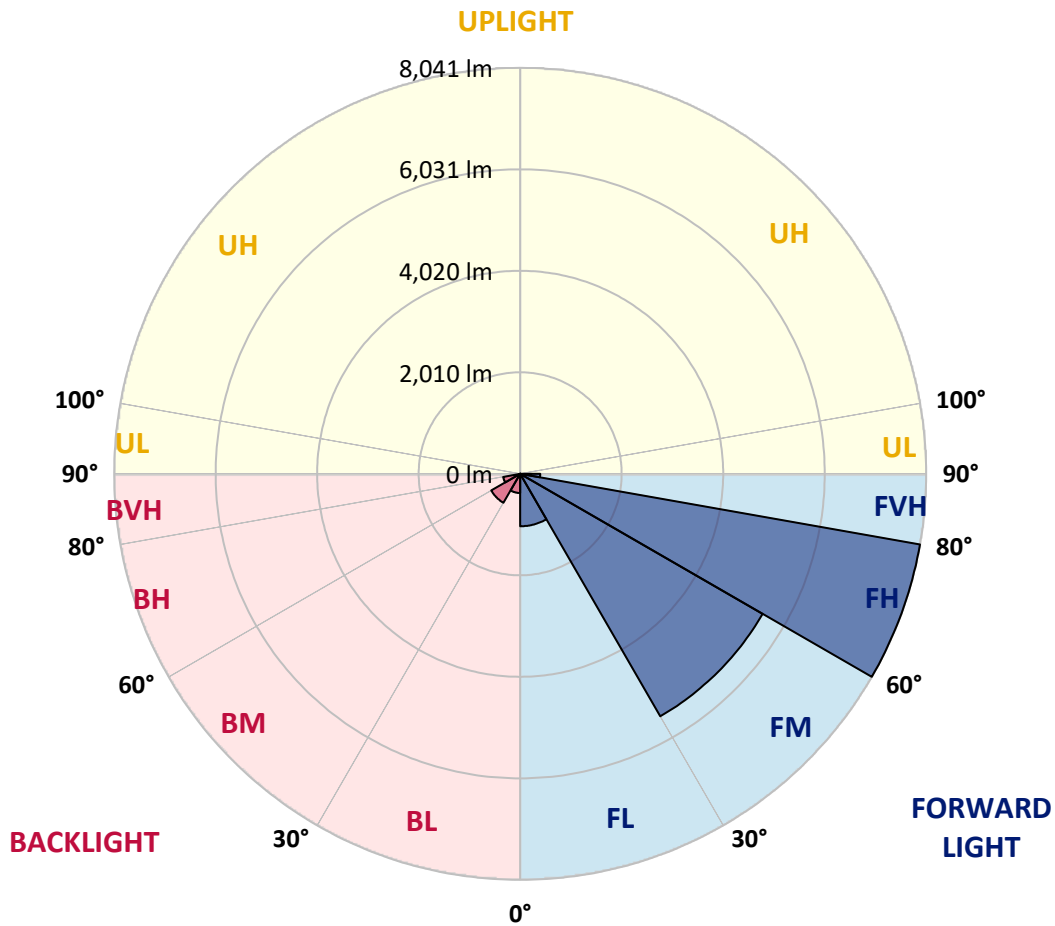
CATALOG NUMBER: ARCH-L-PA3-220-722-U-T4W-HSS

LUMINAIRE CLASSIFICATION SYSTEM LUMEN TABLE AND BUG RATING:

Zone	Lumens	% Fixture	Zone Rating/Lumen Limit		
			B	U	G
FL (0°-30°)	1038.8	6.3			
FM (30°-60°)	5544.7	33.8			
FH (60°-80°)	8041.0	49.0			G4/12000
FVH (80°-90°)	396.1	2.4			G3/500
BL (0°-30°)	380.1	2.3	B1/500		
BM (30°-60°)	661.3	4.0	B1/1000		
BH (60°-80°)	341.0	2.1	B1/500		G1/500
BVH (80°-90°)	1.0	0.0			G0/10
UL (90°-100°)	0.0	0.0		U0/0	
UH (100°-180°)	0.0	0.0		U0/0	

BUG Rating: B1-U0-G4

Type IV Medium





REPORT NUMBER: P399981

CATALOG NUMBER: ARCH-L-PA3-220-722-U-T4W-HSS

CANDELA DISTRIBUTION (FULL):

	0°	5°	15°	25°	35°	44°	45°	55°	65°	75°	85°
0°	1785.5	1785.5	1785.5	1785.5	1785.5	1785.5	1785.5	1785.5	1785.5	1785.5	1785.5
2.5°	1945.9	1942.9	1933.8	1918.7	1903.5	1888.4	1885.4	1861.2	1833.9	1812.7	1794.6
5°	2118.4	2115.4	2100.2	2067.0	2033.7	1994.3	1991.3	1933.8	1882.4	1824.9	1776.4
7.5°	2297.0	2290.9	2263.7	2212.2	2154.7	2094.2	2088.1	2003.4	1927.7	1852.1	1782.5
10°	2436.2	2430.1	2390.8	2330.2	2251.6	2175.9	2166.8	2079.1	2003.4	1906.6	1812.7
12.5°	2572.3	2560.2	2508.8	2442.2	2345.4	2272.7	2263.7	2172.9	2082.1	1982.2	1867.2
15°	2699.5	2684.3	2635.9	2551.2	2448.3	2378.7	2372.6	2275.8	2182.0	2067.0	1939.9
17.5°	2787.2	2781.2	2723.7	2629.8	2530.0	2472.5	2466.4	2366.6	2272.7	2151.7	2015.5
20°	2832.6	2832.6	2778.1	2675.2	2584.5	2545.1	2536.0	2442.2	2351.4	2236.4	2094.2
22.5°	2841.7	2850.8	2808.4	2696.4	2629.8	2596.6	2590.5	2508.8	2421.0	2315.1	2182.0
25°	2859.8	2859.8	2838.7	2717.6	2669.2	2660.1	2657.1	2584.5	2505.8	2399.9	2269.7
27.5°	2881.0	2881.0	2865.9	2747.9	2729.7	2726.7	2723.7	2690.4	2626.8	2502.7	2372.6
30°	2935.5	2938.5	2926.4	2808.4	2796.3	2829.6	2835.6	2817.5	2738.8	2584.5	2478.5
32.5°	3071.7	3044.5	3011.2	2850.8	2872.0	2914.3	2917.3	2881.0	2796.3	2672.2	2605.6
35°	3413.7	3253.3	3102.0	2887.1	2896.2	2938.5	2944.6	2941.6	2890.1	2784.2	2750.9
37.5°	3731.4	3504.4	3289.6	2971.8	2941.6	2987.0	2999.1	3050.5	3011.2	2938.5	2947.6
40°	3916.0	3828.3	3676.9	3204.8	3032.3	3102.0	3114.1	3192.7	3177.6	3147.3	3204.8
42.5°	4485.0	4491.0	4327.6	3552.9	3198.8	3310.8	3325.9	3389.4	3410.6	3425.8	3565.0
45°	5144.7	5165.9	5126.5	4179.3	3513.5	3549.8	3571.0	3655.8	3734.4	3831.3	4085.5
47.5°	5937.6	5919.4	5774.2	4945.0	4061.3	3858.5	3873.7	4037.1	4173.3	4385.1	4748.3
50°	6639.7	6685.1	6409.7	5659.2	4833.0	4345.8	4330.6	4491.0	4736.1	5032.7	5489.7
52.5°	7347.8	7281.3	6909.0	6367.3	5746.9	5008.5	4963.1	5050.9	5395.9	5746.9	6216.0
55°	7535.5	7541.5	7414.4	7142.1	6509.6	5813.5	5737.9	5731.8	6161.5	6400.6	6978.6
57.5°	7904.7	7919.8	7950.1	8004.5	7704.9	6618.5	6539.8	6455.1	6872.7	7011.9	7744.3
60°	8279.9	8298.1	8482.7	8776.3	8576.5	7487.1	7402.3	7202.6	7435.6	7623.2	8549.3
62.5°	8231.5	8358.6	8894.3	9478.4	9454.1	8440.3	8334.4	7853.2	8001.5	8164.9	9287.7
65°	7432.6	7568.8	8773.2	9672.0	10334.8	9381.5	9209.0	8525.1	8534.1	8730.9	9998.9
67.5°	6718.4	6866.7	8016.7	9590.3	10915.8	10225.8	10047.3	9199.9	9057.7	9384.5	10380.2
70°	6306.8	6455.1	7414.4	9336.1	11079.3	11161.0	11006.6	9971.6	9681.1	9980.7	9953.5
72.5°	4935.9	5168.9	6645.7	8851.9	11254.8	12162.7	12041.6	10949.1	10210.7	9357.3	7577.8
75°	1967.1	2182.0	4149.0	7123.9	11033.9	13025.2	12931.4	11387.9	9451.1	6682.1	3879.7
77.5°	593.2	635.5	1153.0	3522.6	8089.3	11548.3	11518.1	9575.2	6688.1	3102.0	1059.2
80°	196.7	217.9	354.1	971.4	3692.1	7214.7	7350.9	6101.0	3038.4	711.2	214.9
82.5°	81.7	90.8	178.6	390.4	1307.4	3108.0	3062.6	2732.7	1059.2	441.8	78.7
85°	21.2	27.2	81.7	223.9	478.2	1071.3	1125.8	917.0	599.2	366.2	24.2
87.5°	0.0	0.0	39.3	90.8	214.9	323.8	338.9	278.4	338.9	275.4	12.1
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0



REPORT NUMBER: P399981

CATALOG NUMBER: ARCH-L-PA3-220-722-U-T4W-HSS

CANDELA DISTRIBUTION (continued):

	90°	95°	105°	115°	125°	135°	145°	155°	165°	175°	180°
0°	1785.5	1785.5	1785.5	1785.5	1785.5	1785.5	1785.5	1785.5	1785.5	1785.5	1785.5
2.5°	1779.5	1764.3	1737.1	1718.9	1694.7	1688.7	1676.6	1661.4	1658.4	1643.3	1646.3
5°	1749.2	1725.0	1676.6	1643.3	1603.9	1591.8	1570.6	1555.5	1543.4	1522.2	1525.3
7.5°	1743.1	1706.8	1640.3	1576.7	1513.1	1467.8	1404.2	1352.8	1310.4	1265.0	1274.1
10°	1764.3	1718.9	1625.1	1537.4	1422.4	1277.1	1110.6	1001.7	947.2	892.8	898.8
12.5°	1806.7	1752.2	1631.2	1498.0	1265.0	1016.8	786.8	638.5	599.2	575.0	578.0
15°	1870.2	1803.7	1649.3	1422.4	1053.2	735.4	523.5	460.0	475.1	484.2	484.2
17.5°	1936.8	1861.2	1664.5	1286.2	814.1	514.5	426.7	420.7	441.8	463.0	463.0
20°	2018.5	1921.7	1667.5	1113.7	587.1	417.6	402.5	402.5	417.6	441.8	441.8
22.5°	2097.2	1988.3	1640.3	917.0	447.9	387.4	387.4	387.4	396.4	420.7	423.7
25°	2191.0	2070.0	1582.8	708.2	384.3	369.2	369.2	372.2	378.3	399.5	402.5
27.5°	2290.9	2154.7	1485.9	517.5	351.1	348.0	351.1	354.1	357.1	378.3	384.3
30°	2405.9	2248.5	1361.8	387.4	320.8	320.8	329.9	335.9	335.9	354.1	360.1
32.5°	2539.1	2372.6	1213.5	320.8	290.5	287.5	302.6	311.7	311.7	326.8	332.9
35°	2705.5	2499.7	1035.0	284.5	266.3	260.3	266.3	281.4	287.5	299.6	302.6
37.5°	2926.4	2651.0	844.3	263.3	248.2	236.1	236.1	239.1	251.2	263.3	266.3
40°	3207.9	2817.5	656.7	248.2	230.0	217.9	208.8	205.8	202.8	211.8	217.9
42.5°	3561.9	3005.1	490.3	233.0	214.9	196.7	184.6	172.5	157.4	154.3	157.4
45°	4015.9	3235.1	363.2	220.9	205.8	178.6	157.4	136.2	108.9	99.9	102.9
47.5°	4551.5	3474.2	284.5	208.8	199.7	157.4	130.1	93.8	66.6	60.5	63.6
50°	5120.5	3704.2	242.1	193.7	187.6	136.2	93.8	57.5	39.3	39.3	42.4
52.5°	5604.7	3834.3	220.9	181.6	169.5	112.0	60.5	33.3	24.2	24.2	27.2
55°	6073.8	3903.9	205.8	169.5	145.3	78.7	33.3	21.2	15.1	15.1	15.1
57.5°	6558.0	3934.2	187.6	154.3	115.0	48.4	18.2	12.1	9.1	9.1	9.1
60°	6987.7	3876.7	160.4	127.1	75.7	24.2	9.1	9.1	6.1	3.0	3.0
62.5°	7347.8	3767.7	112.0	90.8	45.4	12.1	6.1	3.0	0.0	0.0	0.0
65°	7568.8	3592.2	72.6	60.5	27.2	9.1	3.0	0.0	0.0	0.0	0.0
67.5°	7505.2	3262.3	45.4	39.3	12.1	6.1	3.0	0.0	0.0	0.0	0.0
70°	6772.8	2675.2	33.3	24.2	9.1	3.0	0.0	0.0	0.0	0.0	0.0
72.5°	4881.4	1809.7	24.2	15.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0
75°	2348.4	644.6	15.1	12.1	3.0	0.0	0.0	0.0	0.0	0.0	0.0
77.5°	575.0	142.2	9.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
80°	127.1	27.2	6.1	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
82.5°	42.4	12.1	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
85°	15.1	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
87.5°	9.1	3.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
90°	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

(END OF REPORT)